

Amendments to the Specification:

Please replace the paragraph beginning on page 7, line 29 with the following amended paragraph:

In step 504 it is determined if the primitive is totally outside of the screen region 300, such as a primitive 302 in FIG. 3. The primitive 302 will be found to be totally outside the screen region 300 if at least one of the following is logically true given a start point of $x = XSTART$ and $y = YSTART$ for the primitive:

$$XDIR \text{ AND } ((X < XLEFT) \text{ OR } (XEND > XRIGHT))$$

$$\underline{XDIR} \overline{XDIR} \text{ AND } ((X > XRIGHT) \text{ OR } (XEND < XLEFT))$$

$$YDIR \text{ AND } ((Y < YTOP) \text{ OR } (YEND > YBOTTOM))$$

$$\underline{YDIR} \overline{YDIR} \text{ AND } ((Y > YBOTTOM) \text{ OR } (YEND < YTOP))$$

where an underlined $XDIR$ or $YDIR$ refers to a logical NOT DIR .

Please replace the paragraph beginning on page 8, line 13 with the following amended paragraph:

The portion of the primitive lying within the screen area 300 is identified as follows. First, the variable y is incremented if the following first value is logically true:

$$(((YDIR \text{ AND } (Y > YBOTTOM)) \text{ OR } ((\underline{YDIR} \overline{YDIR} \text{ AND } (Y < YTOP))))$$

Then the variable x is incremented if the following second value is logically true:

$$(((XDIR \text{ AND } (X > XRIGHT)) \text{ OR } ((\underline{XDIR} \overline{XDIR} \text{ AND } (X < XLEFT))))).$$

Please replace the paragraph beginning on page 9, line 4 with the following amended paragraph:

It is to be noted that in general the method steps and the equations involve comparisons of the current x and y coordinates to the $XLEFT$, $XRIGHT$ and $YTOP$ and $YBOTTOM$ of the screen area, as well as the X direction and Y direction values at that x,y coordinate. Note that

when x and y are incremented, there are eight possible directions of movement as depicted in FIG. 4. For example, the direction 401 has an X direction from ~~left to right~~ right to left and is assigned a value of $[[0]]1$, and a Y direction from bottom to top which has an assigned value of 1. The direction symbol 402 has an X direction of left to right and therefore has an assigned value of 0 and a Y direction of top to bottom which has an assigned value of 0. Direction symbol 403 would have an X direction value of 0 and a Y direction value of 1. The direction symbol 404 has an X direction value of 0 and a Y direction value of 1. The direction symbol 405 has an X direction value of 0 and a Y direction value of 1. The direction symbol 406 has an X direction value of 0 and a Y direction value of 1. The direction value symbol 407 has an X direction value of 0 and a Y direction value of 0. The direction symbol 408 has an X direction value of 0 and a Y direction value of 0.

Please replace the paragraph beginning on page 11, line 1 with the following amended paragraph:

Thus, in general, in the primitive location module 202 the primitive values are compared to the screen region values to determine if the primitive is totally outside the screen region. If this is not true, then the edge walker module 204 and the span walker and fill module 206 determine the start point of the intersection of the primitive in the screen region for filling the pixels that are within this portion. The filling of the pixels within the portion within the screen region is finished when one of the following is true:

$(XDIR \text{ AND } (X < XLEFT)),$
 $(\overline{XDIR} \text{ AND } (X > XRIGHT)),$
 $(YDIR \text{ AND } (Y < YTOP)),$
 $(\overline{YDIR} \text{ AND } (Y > YBOTTOM))$